Sl NO		Description	Nos	BAR DIA	No. Bars	Total No. bars	L	Crank length (42d)	Actual Length	Total Length	Weight	Total Weight
				mm			m	m	m	m	kg/m	Kg's
Project name		MAINTENANCE AND REPAIR WORKS AT PRIMARY HEALTH CENTER AT AGRAHARA LAYOUT IN WARD NO. 05 BYATARAYANAPURA SUB DIVISION										
Client		Sri. Gnanendra Murthy M D #410, Balaji Nilaya, 5th Main Raod, 4th Cross, Near Priya Darshini School, Kengeri Satellite Town, Bangalore- 60										
Description		Steel calculation sheet										
		MEASUREMENT SHEET - 1ST & Part Bill										
Measurements		**Description**	**Nos**	**BAR DIA**	**No. Bars**	**Total No. bars**	**L**	**Crank length (42d)**	**Actual Length**	**Total Length**	**Weight**	**Total weight**
Chainage				**mm**			**m**	**m**	**m**	**m**	**kg/m**	**Kg's**
From	To											
E3		Providing Thermo-Mechanically Treated bars of grade Fe-500D or more Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position, binding and anchoring to adjacent members whereever necessary complete as per Design including cost										
		Footing										
		C1	2									
		Main Bars		16	10	20	1.2	0.00	1.20	24.00	1.578336	37.88
		Distribution		16	10	20	1.2	0.00	1.20	24.00	1.578336	37.88
		Columns									**sub total**	**75.76**
		C1	2									
		Main Bars		20	4	8	3.40	0.00	3.40	27.20	2.46615	67.08
				16	2	4	3.40	0.00	3.40	13.60	1.578336	21.47
		Stirrups @200mm c/c		10	18	36	1.6	0	1.6	57.6	0.616538	35.51
											Sub-total	**124.06**

3.5.22

25/2/2022

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF THE PROJECT: MAINTENANCE AND REPAIR WORKS AT PRIMARY HEALTH CENTER AT AGRAHARA LAYOUT IN WARD NO. 05

MEASUREMENT SHEET

First & Part Bill

Sri. Gnanendra Murthy M D #410, Balaji Nilaya, 5th Main Raod, 4th Cross, Near Priya Darshini School, Kengeri Satellite Town, Bangalore- 60

Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate Rs	Amount Rs	Remarks
Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clodscomplete and as per the directions of the Engineer-in-charge									
	cum								
Vide Total executed Quantity from premeasuremet Page no.1						**160.82**			
Total Executed Quantity						**160.82**			
Tender Quantity						**90.45**			
Quantity Upto 125%						**113.06**	**508.78**	**57523.94**	
Quantity Above 125%						**47.76**	**508.78**	**24300.19**	
Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete and as per the directions of the Engineer-in-charge									
	cum								
Vide Total executed Quantity from premeasuremet Page no.1						**26.77**			
Total Executed Quantity						**26.77**			
Tender Quantity						**15.08**			
Quantity Upto 125%						**18.85**	**2752.39**	**51882.55**	
Quantity Above 125%						**7.92**	**2752.39**	**21794.09**	
Providing and laying in position plain cement concrete of mix 1:4:8(M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete and as per the directions of the Engineer-in-charge									
	cum								
Vide Total executed Quantity from premeasuremet Page no.3						**26.77**			
Total Executed Quantity						**26.77**			
Tender Quantity						**15.08**			
Quantity Upto 125%						**18.85**	**5781.26**	**108976.75**	
Quantity Above 125%						**7.92**	**5781.26**	**45777.46**	

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

ASSISTANT ENGINEER

A.E.E. (Project)

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BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF THE PROJECT: MAINTENANCE AND REPAIR WORKS AT PRIMARY HEALTH CENTER AT AGRAHARA LAYOUT IN WARD NO. 05

MEASUREMENT SHEET

First & Part Bill

Sri. Gnanendra Murthy M D #410, Balaji Nilaya, 5th Main Raod, 4th Cross, Near Priya Darshini School, Kengeri Satellite Town, Bangalore- 60

Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate Rs	Amount Rs	Remarks
Providing and laying in position plain cement concrete of mix M15 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation,plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete and as per the directions of the Engineer-in-charge									
Item No. 04									
Measurements taken on									
Above SSM									
Compound wall									
South Side	Cum	1.0	50.65	0.45	0.15	3.42			
East Side	Cum	1.0	54.80	0.45	0.15	3.70			
	Cum	1.0	47.70	0.45	0.15	3.22			
North Side	Cum	1.0	80.35	0.45	0.15	5.42			
For Tiles									
Sitting Area	Cum	1	4.5	3.6	0.15	2.43			
Passage	Cum	1	11.3	3	0.15	5.09			
	Cum	1	5.2	0.7	0.15	0.55			
	Cum	0.5	5.2	2.3	0.15	0.90			
					Total Executed Quantity	**24.72**			
					Tender Quantity	**26.50**			
					Now To be Paid Qty	**24.72**	**6143.86**	**151871.61**	
Providing and laying/fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick for flooring conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, mortar including cutting, griding the edge to half/full round wherever required, labour, curing complete and as per the directions of the Engineer-in-charge									
Item No. 05									
Measurements taken on									
Infront of Building									
Sitting Area	sqm	1	4.5	3.6		16.20			
Passage	sqm	1	11.3	3		33.90			
	sqm	1	5.2	0.7		3.64			
	sqm	0.5	5.2	2.3		5.98			
					Total Executed Quantity	**59.72**			
					Tender Quantity	**129.94**			
					Now To be Paid Qty	**59.72**	**1396.02**	**83370.31**	

A.E.E. (Project)

A.E.E. (Project)

A.E.E. (Project)

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER

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BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF THE PROJECT: MAINTENANCE AND REPAIR WORKS AT PRIMARY HEALTH CENTER AT AGRAHARA LAYOUT IN WARD NO. 05

MEASUREMENT SHEET

First & Part Bill

Client: Sri. Gnanendra Murthy M D #410, Balaji Nilaya, 5th Main Raod, 4th Cross, Near Priya Darshini School, Kengeri Satellite Town, Bangalore- 60

Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate Rs	Amount Rs	Remarks
Providing and constructing granite / trap / basalt size stone masonry in foundation cement mortar 1:6, stone hammerddressed in courses not less than 20 cms high, bond stones at 2m apart in each course including cost of materials, labour, curing complete and as per the directions of the Engineer-in-charge									
	Cum								
Vide Total executed Quantity from premeasuremet Page no.						80.69			
Total Executed Quantity						80.69			
Tender Quantity						48.24			
Quantity Upto 125%						60.30	5207.89	314035.77	
Quantity Above 125%						20.39	5207.89	106186.34	
Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete and as per the directions of the Engineer-in-charge									
	cum								
Vide Total executed Quantity from premeasuremet Page no.2						25.16			
Tender Quantity						12.06			
Now To be Paid Qty									
Quantity Upto 125%						15.08	227.76	3433.48	
Quantity Above 125%						10.08	227.76	2296.59	2283
Conveying the excavated earth, debries etc., with all lead and lifts including loading and unloading charges etc., complete and as per the directions of the Engineer-in-charge									
	Sqm								
Vide Total executed Quantity from premeasuremet Page no.						135.67			
Tender Quantity						78.39			
Now To be Paid Qty									
Quantity Upto 125%						97.99	70.39	6897.34	
Quantity Above 125%						37.68	70.39	2652.20	
Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates									
	Cum								
Vide Total executed Quantity from premeasuremet Page no.3						1.44			
Now To be Paid Qty						1.44	7797.79	11228.82	

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BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF THE PROJECT: MAINTENANCE AND REPAIR WORKS AT PRIMARY HEALTH CENTER AT AGRAHARA LAYOUT IN WARD NO. 05

MEASUREMENT SHEET

First & Part Bill

Client: Sri. Gnanendra Murthy M D #410, Balaji Nilaya, 5th Main Raod, 4th Cross, Near Priya Darshini School, Kengeri Satellite Town, Bangalore- 60

Chainage in m: From ___ To ___

	Description of Item	Unit	No	Length (m)	Breadth (m)	Depth (m)	Quantity	Rate Rs	Amount Rs	Remarks
E2	Providing and laying in position Reinforced cement concrete for all Super structures of building , Road works, Water works, Irrigation works & super structure works of bridges upto 3.50 m height. The granite/ trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers laid in layers, well compacted using needle vibrators. The cost includes all lead & lifts, cost of all materials, quality confirming to the requirements of relevant IS codes , labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement, dowel bars & formwork to be paid separately) M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates									
Measurements taken on										
	Columns	Cum	2	0.4	0.4	1.60	0.51			
						Total Executed Quantity	0.51			
						Now To be Paid Qty	0.51	8215.14	4206.15	
E3	Providing Thermo-Mechanically Treated bars of grade Fe-500D or more Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position, binding and anchoring to adjacent members whereever necessary complete as per Design including cost of material, labour, usage charges complete as per specifications. (The laps and wastages shall not be measured separately)									
		Kg								
	Vide Total executed Quantity from premeasuremet Page no.3						199.82			
						Now To be Paid Qty	199.82	122.34	24445.00	
E4	Fabricating, providing and erecting in position of MS Hot Dip Galvanised Sq. Hallow Poles of 132 X 132 Heavy gauge of length 3000mm with MS. Hot dip Galvanised grill work as per approved design and drawing of chief architect. Using 12 X 75mm galvanised flat for alround frame and 20 X 20mm galvanised forged design with square for vertical at 150mm c/c as shown in the drawing including providing forged ornamental arrowhead at top and bottom. The work is inclusive of throughing flat, square rods, placing welding all the joints, including grinding, finishing 2 coats of anticorrosive paint over one coat of metal primer. The rate is inclusive of all materials like MS. Hollow galvanized pipe, flats, forged square rods, cost of labour for all items of work cost painting, welding, cutting, grinding with all lead and lift as per specification including loading and unloading with cost and conveyance of all materials, labour, machinery andincidental charges for the successful completion of the work as per the direction of the Engineer-in-charge of the work. (Data Rate)									
Measurements taken on										
	Compound wall									
	South Side	Sqm	1	50.9		0.40	20.36			
							20.36			
						Now To be Paid Qty	20.36	9593.88	195331.49	
						TOTAL AMOUNT			1216210.16	

12,16,180=00

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Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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